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EXAMINER

JARRETT, SCOTT L

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 08/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/931,294

Applicant(s)

DUTTA ET AL.

Examiner

Scott L. Jarrett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the drawings are informal and/or illegible. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Method and System for Product Delivery within a Predetermined Time Period Utilizing Alternate Suppliers.

Claim Objections

3. Claims 3-4 and 25 are objected to because of the following informalities: the claims contain a grammatical error, "check point" instead of the intended "checkpoint."

Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. Claims 1-32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, Claims 1-32 produce a useful, concrete and tangible result of delivering a product within a predetermined time period utilizing alternate suppliers.

Regarding Claims 1-11, Claims 1-11 only recite an abstract idea. The recited method for ensuring the delivery of a product does not apply, involve, use or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The claimed invention, as a whole, is not within

the technological art as explained above therefore claims 1-11 are deemed to be directed to non-statutory subject matter.

Mere intended or nominal use of a component, albeit within the technological arts, does not confer statutory subject matter to an otherwise abstract idea if the component does not apply, involve, use, or advance the underlying process. In the present case, none of the recited steps are directed to anything in the technological arts as explained above with the exception of the recitation of the term "database" in claim 2. Therefore, the term discussed is taken to merely recite a field of use and/or nominal recitation of technology.

Examiner suggests that the applicant incorporate into Claims 1-11 language that the proposed method is a computer-implemented (computerized) method and that the method steps are implemented by a computer to overcome this rejection.

Regarding Claims 12-22, Claims 12-22 only recite an abstract idea. The recited method for tracking the delivery of a product does not apply, involve, use or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The claimed invention, as a whole, is not within the technological art as explained above therefore claims 12-22 are deemed to be directed to non-statutory subject matter.

Mere intended or nominal use of a component, albeit within the technological arts, does not confer statutory subject matter to an otherwise abstract idea if the component does not apply, involve, use, or advance the underlying process. In the

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present case, none of the recited steps are directed to anything in the technological arts as explained above with the exception of the recitation of the term "database" in claim 14. Therefore, the term discussed is taken to merely recite a field of use and/or nominal recitation of technology.

Examiner suggests that the applicant incorporate into Claims 12-22 language that the proposed method is a computer-implemented (computerized) method and that the method steps are implemented by a computer to overcome this rejection.

Regarding Claims 23-32, claims 23-32 do not utilize the proper computer program product format and effectively recite descriptive material (software) per se and are therefore deemed to be directed to non-statutory subject matter where there is no indication that the proposed software is recorded on computer-readable medium and/or capable of execution by a computer.

Examiner suggests that the applicant incorporate into Claims 23-32 language that the proposed software is recorded on computer-readable medium and capable of execution by a computer to overcome this rejection.

Correction required. See MPEP § 2106 [R-2].

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 2, 4, 6, 11, 13, 24, 27, 31 and 37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claims 2 and 24, Claims 2 and 24 recite the limitation "the **client** delivery order" in Claims 1 and 23 respectively. There is insufficient antecedent basis for this limitation in the claim.

Examiner interpreted the claims to read "the **customer** delivery order" for the purposes of examination.

Regarding Claim 4 the phrase "can" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.

Examiner suggests that the applicant amend Claim 4 to recite that the delivery route checkpoints are geographic or time checkpoints or both to overcome this rejection.

Examiner interpreted the claim to read "checkpoints **are** geographic points along the physical delivery route **or** time checks...." for the purposes of examination.

See MPEP § 2173.05(d).

Regarding Claims 6 and 27, Claims 6 and 27 recite the limitation "**client** order" in Claims 1 and 23 respectively. There is insufficient antecedent basis for this limitation in the claim.

Examiner interpreted the claims to read "**customer** order" for the purposes of examination.

Regarding Claims 7 and 28, Claims 7 and 28 recite the limitation "**the initial** product order" in Claims 6 and 27 respectively. There is insufficient antecedent basis for this limitation in the claim.

Examiner interpreted the claims to read "**the delivery** order" for the purposes of examination.

Regarding Claims 11 and 31, Claims 11 and 31 recite the limitations "**the original** product order" and "**the initial** product supplier" in Claims 6 and 27 respectively. There is insufficient antecedent basis for this limitation in the claim.

Examiner interpreted the claims to read "**the delivery** order" and "**product** supplier" respectively for the purposes of examination.

Regarding Claim 13, Claim 13 recites the limitations "**the client**" in Claim 12. There is insufficient antecedent basis for this limitation in the claim.

Examiner interpreted the claim to read "**the customer**" for the purposes of examination.

Regarding Claim 37, Claim 37 recites the limitations "**decision making entity**" in Claim 36. There is insufficient antecedent basis for this limitation in the claim.

Examiner interpreted the claim to read "**decision making component**" for the purposes of examination.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 3-4, 6-8, 12, 23, 25 and 27-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Bush, Ronald Roscoe, U.S. Patent No. 5,835,377.

Regarding Claims 1 and 23 Bush teaches a method and system for tracking and optimizing the delivery of parts (manufacturing materials, products, etc.) in a just-in-time manufacturing system (Abstract; Column 1, Lines 58-68); just in time systems are production/order/inventory planning and management systems wherein products, materials, parts, and the like are ordered/pulled so they arrive just-in-time for the next operation, shipment, processing, etc. Bush further teaches that the delivery management system and method implements alternative shipping and/or sourcing delivery mechanisms should a shipment (delivery of products/parts) will not reach the manufacturing facility (delivery destination) on schedule (Column 3, Lines 4-15).

More generally Bush teaches a method and system for ensuring the delivery of a product (materials, parts, goods, etc.) to a delivery destination (manufacturing facility) within a predetermined time period ("just in time") comprising (Column 1, Lines 58-68; Column 2, Lines 45-61; Column 3, Lines 4-15):

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- receiving (collecting, providing, etc.) a delivery order (request, purchase order, shipping order, etc.) from a customer (user, client, manufacturing facility, etc.) containing product (parts, materials, etc.) and delivery (time and location) information (Column 5, Lines 49-47; Figure 4);

- processing (reviewing, acting upon, implementing a series of steps, etc.) the delivery order (Column 3, Lines 4-15 and 40-47; Figure 4);

- shipping the order to the delivery location (Column 3, Lines 50-57; Figure 4);

- tracking the shipped order along a delivery route (itinerary, schedule, etc.) to assess the progress (status) of the shipment/delivery (Column 5, Lines 51-68; Column 6, Lines 1-34; Column 7, Lines 1-3; Figure 2, Element 20; Figure 4); and

- implementing an alternative delivery program (method, step, process, policy, rule, etc.), if the order tracking indicates that the shipment will not reach the delivery destination within the predetermined time (early, late, delayed, etc.; Column 3, Lines 4-15; Column 5, Lines 51-68; Column 6, Lines 1-34; Figure 4, Elements 48, 50, 52 and 54).

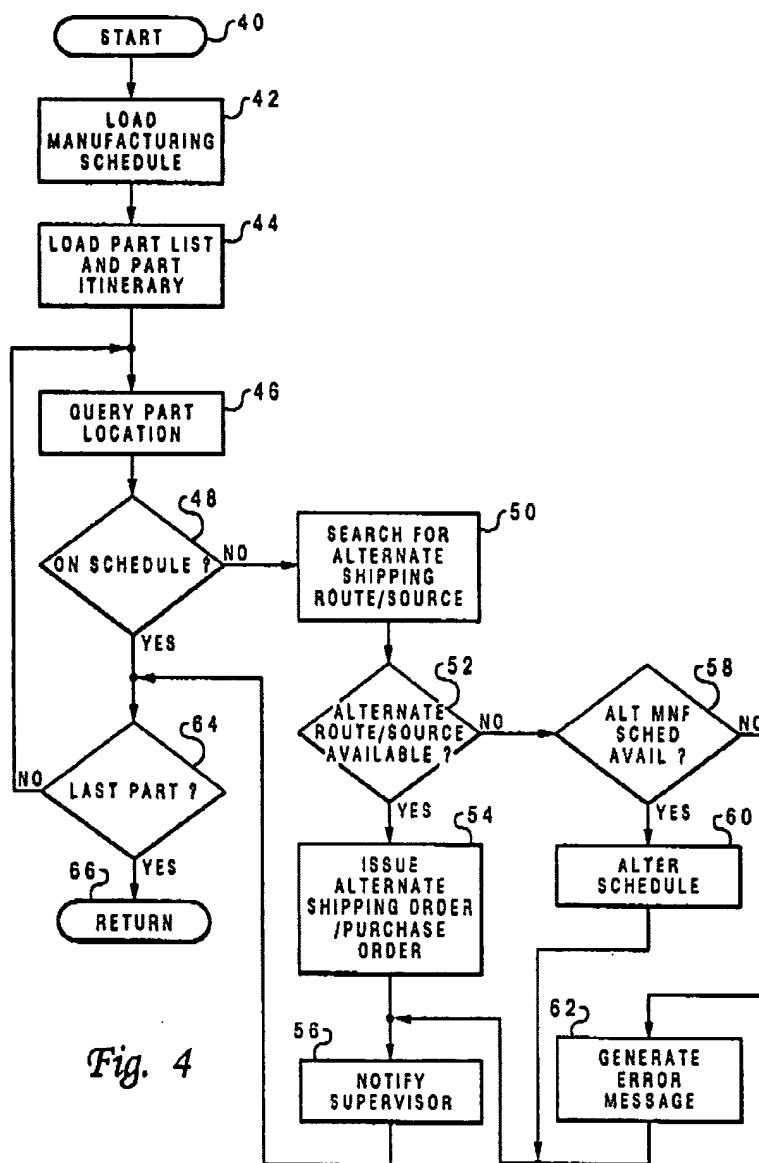


Fig. 4

Regarding Claims 3 and 25 Bush teaches a delivery system and method wherein shipping the product delivery order (shipment) further comprising determining a delivery route (itinerary) for the product/order, the delivery route containing checkpoints (periodic time checks/queries) for tracking the product during delivery (Column 3, Lines 4-15; Column 5, Lines 33-38; Column 6, Lines 65-68; Column 7, Lines 1-3).

Regarding Claim 4 Bush teaches a delivery system and method wherein delivery route checkpoints are at least one of geographic points along the delivery route or time checkpoints at designated times during the delivery (Column 3, Lines 4-15; Column 5, Lines 33-38; Column 6, Lines 65-68; Column 7, Lines 1-3; Figure 4, Element 46).

Regarding Claims 6 and 27 Bush teaches a delivery system and method wherein implementing an alternative delivery program/process comprises:

- contacting (communication, calling, etc.) an alternative supplier (product supplier, shipping order, purchase order, etc.; Column 6, Lines 5-27; Figure 4);
- providing the alternative supplier with the delivery order information (product, location, shipping order, purchase order, etc.; Column 6, Lines 5-27; Figure 4); and
- shipping the product from the alternative supplier to the delivery destination (Column 3, Lines 4-15; Column 6, Lines 5-27; Figure 4).

Regarding Claims 7 and 28 Bush teaches a delivery system and method further comprising determining a delivery location for the delivery order (Abstract; Column 3, Lines 4-15; Column 6, Lines 60-68; Column 7, Lines 1-3).

Regarding Claims 8 and 29 Bush teaches a delivery system and method wherein the delivery order is delivered to the initial delivery destination (Abstract; Column 3, Lines 4-15; Column 6, Lines 60-68; Column 7, Lines 1-3).

Regarding Claim 12 Bush teaches a method and system for tracking the delivery of a product (shipment, parts, materials, etc.) to a designated location (manufacturing facility) within a predetermined delivery time (just-in-time) comprising (Abstract; Column 3, Lines 4-15):

- receiving a delivery order from a customer, the delivery order containing product and delivery (time and location) information (Column 5, Lines 39-47);
- supplying (providing, sending, etc.) delivery order information to a shipping and handling entity (shipper, carrier, logistics provider, itinerary, shipping order, purchase order, etc.; Column 5, Lines 45-68; Column 6, Lines 1-34; Figure 4);
- determining a delivery route for the product, the delivery route containing handover points (checkpoints, processing stations, etc.; Column 3, Lines 4-15; Column 5, Lines 45-68; Column 6, Lines 1-27; Figure 4);
- recording (storing, capturing, etc.) the "transfer" of the product order (shipment) from the product supplier to the shipping and handling entity (e.g. storing itinerary, shipping order and/or purchase order information in the system; Abstract; Column 3, Lines 4-15; Claim 5);
- tracking the shipped order along the delivery route (Column 5, Lines 51-68, Column 6, Lines 1-34; Column 7, Lines 1-3);
- assessing the progress of the shipment (shipped order) utilizing elapsed time (Column 5, Lines 51-68, Column 6, Lines 1-34; Column 7, Lines 1-3); and
- implementing an alternative delivery program (process, method, steps, etc.), if the order tracking indicates that the shipment will not reach the delivery destination within

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the predetermined delivery time (Column 3, Lines 4-15; Column 5, Lines 51-68; Column 6, Lines 1-34; Figure 4).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2, 5, 9-11, 13-22, 24, 26 and 30-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bush, Ronald Roscoe, U.S. Patent No. 5,835,377 as applied to claims 1, 3-4, 6-8, 12, 23, 25 and 27-29 above and further in view of Aklepi et al., U.S. Patent No. 6,795,823.

Regarding Claims 2 and 24 Bush teaches a product/materials delivery system and method, as discussed above, wherein delivery order processing further comprises:

- recording (tracking, storing, collecting, etc.) the delivery order information in the system (file, memory, system, etc.; "stored itinerary", Abstract; "loaded into the computer system", Column 3, Lines 4-15; Figure 4, Elements 42 and 44);
- scheduling the order with a supplier (product, itinerary, shipping order, purchase order, etc.; Column 1, Lines 42-57; Column 6, Lines 5-27; Figure 4); and

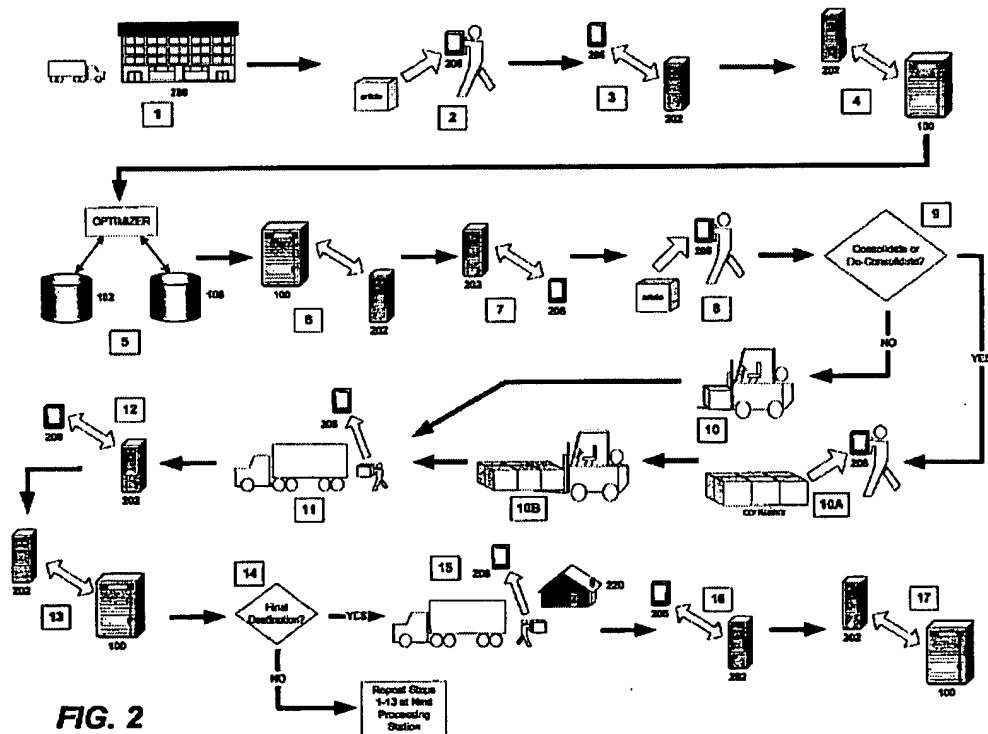
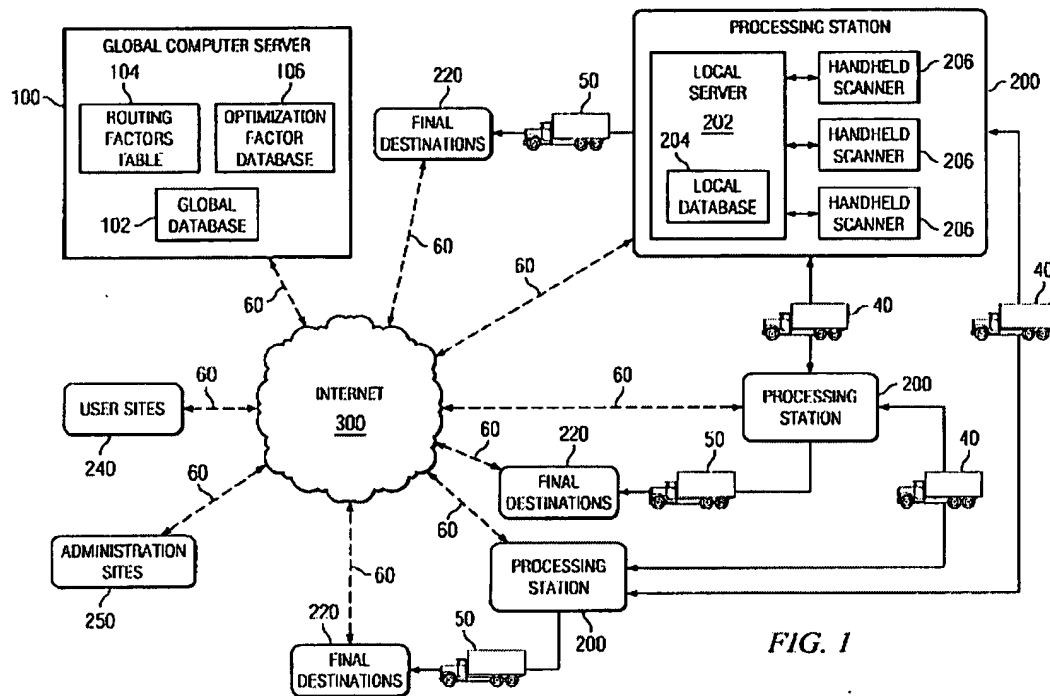
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- selecting a shipping and handling entity (transportation mode, shipping route/source) to ship the product (logistics provider, carrier, shipper, etc.; Column 1, Lines 42-57; Column 6, Lines 5-27; Figure 4).

Bush does not expressly teach that the stored delivery information (itinerary, etc.) is stored/recorded in a database as claimed.

Aklepi et al. teach storing/recording information a plurality of delivery information a database (including delivery order information), in an analogous art of product/materials delivery management, for the purposes of providing a convenient and/or efficient mechanism for storing and accessing a plurality of data via the Internet (Column 4, Lines 50-68; Column 6, Lines 17-24; Column 7, Lines 10-35; Figure 1, Element 102).

Aklepi et al. further teach a delivery system and method wherein the shipment tracked/monitored and its delivery route is continually optimized in real-time/near real-time as it is processed by a plurality of shipping and handling entities and checkpoints (i.e. the route and delivery time are re-calculated at each checkpoint, exchange, intermediate processing station, etc.; Abstract; Column 4, Lines 51-68; Column 9, Lines 1-23; Figures 1-2). Aklepi et al. further teach that the delivery system automatically detects and compensates (alternative shipping/routing) misrouted shipments (Column 10, Lines 42-59).



It would have been obvious to one skilled in the art at the time of the invention that the delivery system and method, with its ability to store/record a plurality of delivery information, as taught by Bush would have benefited from recording/storing that information in a database in view of the teachings of Aklepi et al.; the resultant system enabling users to efficiently and/or conveniently store and/or access the plurality of delivery information stored by the system via the Internet (Aklepi et al.: Column 10, Lines 13-43).

Regarding Claims 5 and 26 Bush teaches a delivery system and method wherein tracking further comprises:

- monitoring the delivery route (itinerary) checkpoints to determine the progress of the delivery (Column 3, Lines 4-15; Column 5, Lines 33-38; Column 6, Lines 65-68; Column 7, Lines 1-3; Figure 4, Elements 46 and 48);
- accommodating and notifying (altering) the customer, manufacturing processes or other processes/systems of the delayed shipment and/or alternative source/supplier (Column 6, Lines 1-49; Figure 4);
- determining whether the predetermined product delivery time can be achieved based on the revised route/itinerary information (Column 5, Lines 45-68; Column 6, Lines 1-26; Figure 4).

Bush does not expressly teach that the product delivery system and method for a just-in-time manufacturing environment (i.e. delivering parts just prior to when they are

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needed for shipment and/or processing) calculates a revised delivery time based on the delivery's progress as claimed.

Aklepi et al. teach re-calculating (determining, estimating, etc.) at each checkpoint (exchange, intermediate processing station, etc.) a revised delivery time based on the delivery's progress thereby providing real-time and/or near-real-time tracking information, in an analogous art of delivery management, for the purposes of optimizing the delivery (route, schedule, etc.) to ensure the delivery of the shipment/product at a predetermined time and location (Column 4, Lines 51-60; Column 9, Lines 1-23).

It would have been obvious to one skilled in the art at the time of the invention that the delivery system and method in a just-in-time manufacturing environment, with its ability to notify/alert users, processes and systems of delays and/or alternative delivery mechanisms, as taught by Bush would have benefited from calculating a revised (updated) delivery time (estimated time of arrival) in view of the teachings of Aklepi et al.; the resultant system enabling the system to provide the most accurate tracking information possible and/or ensure the on-time delivery of the shipment by continually optimizing the delivery route (schedule, itinerary; Aklepi et al.: Column 1, Lines 65-68; Column 9, Lines 19-23).

Regarding Claims 9-10, 30 and 32 Bush teaches a delivery system and method wherein alternative suppliers/sources, located in close proximity to the delivery location (Column 5, Lines 23-26), and/or shipping and handling entities (shippers, carriers, transportation modes, etc.) are utilized to ensure the delivery of a product (parts, materials, etc.) during a predetermined period of time (i.e. just-in-time manufacturing) as discussed above.

Bush does not teach exchanging the product of an alternate supplier/source with the originally ordered/shipped product as claimed.

Official notice is taken that inventory swapping (i.e. when an originally ordered shipped product is delivered to the alternative supplier and becomes part of the alternate supplier's inventory) is old and well as evidenced at least in part by the applicant's own admission (Specification: "Inventory swapping between suppliers of the same product are not unusual in many industries.", Page 10, Lines 16-18).

An example of inventory swapping can be found in the airline industry wherein airlines share "local" parts inventories when a part necessary for an aircraft repair is ordered but will not arrive in the required time period. In essence airlines become alternative suppliers for one another by providing/sourcing the necessary part and once the originally ordered part arrives it is sent/forwarded to the alternative supplier (airline) to replace/replenish their parts inventory.

It would have been obvious to one skilled in the art at the time of the invention that the delivery system and method, with its ability to identify, select and ship alternative products from an alternative source/supplier in order to ensure an on time product delivery, as taught by Bush would have benefited from replenishing the inventory of the alternative supplier with the originally scheduled product/delivery order in view of the teachings of official notice; the resultant system enabling the alternate supplier/source to replenish his/her inventory.

Regarding Claims 11 and 31 Bush does not expressly teach that the originally ordered product (shipment) is returned to the initial product supplier as claimed.

Official notice is taken that returning an initial/originally order product/shipment to the initial/original supplier/source due to the inability of the original/initial shipment to meet its delivery commitments is old and very well known as many delivery contracts guarantee the arrival of shipments as part of the original contract.

An example can be found in expedited shippers that contractually commit to delivery products (goods, shipments) to a delivery destination during a predetermined time period/window (e.g. overnight shipments guaranteed to arrive prior to 10AM) and in failing to do so compensate the user for failing to meet their commitments.

It would have been obvious to one skilled in the art at the time of the invention that the delivery system and method as taught by Bush would have benefited from

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enabling users (businesses, system, etc.) to return un-necessary (no longer needed) products (parts, shipments, materials) to the original/initial supplier/source in view of the teachings of official notice; the resultant system enabling users to refuse delivery of shipments (products) that are no longer required/necessary due to the senders/shippers inability to delivery the product on time.

Regarding Claims 13-14 Bush teaches a delivery system and method wherein the system alerts/notifies related systems/processes as well as users (managers, etc.) of the alternative delivery/shipment (shipping orders, alerts, error messages, etc.; Column 6, Lines 16-26; Figure 4, Element 54). Bush further teaches that the delivery system and method records (stores) a plurality of information as discussed above.

Bush does not expressly teach informing the customer (client) of the transfer of the delivery order from the supplier to the shipping and handling entity or recording the time of the transfer in a database as claimed.

Aklepi et al. teach informing (notifying, alerting, communicating, etc.) the user (client, customer, etc.) that the product delivery order (shipment) has been shipped (i.e. transferred to, picked up by, etc. the shipper, carrier, etc.) via the an Internet tracking site/web page (Column 10, Lines 13-40), in an analogous art of delivery management, for the purposes of providing users with real-time and/or near real-time shipment status/progress information (Column 4, Lines 37-60).

Aklepi et al. further teach recording (entering, storing, saving, collecting, capturing, etc.) the time of the transfer/exchange (processing station data) in a database (Column 5, Lines 15-25 and 33-65; Column 7, Lines 50-68; Figure 2).

It would have been obvious to one skilled in the art at the time of the invention that the delivery system and method, with its ability to alter/inform users and systems/processes of the alternative delivery/source arrangements, would have benefited from providing additional alters/notifications including but not limited to notifying a user that the shipment (delivery product order) has been transferred to the shipping and handling entity as well recording the time of the transfer in a database in view of the teachings of Aklepi et al.; the resultant system enabling users/customers to access, in real-time or near real-time, the status/progress of their product delivery order via the Internet (shipment; Aklepi et al.: Column 4, Lines 51-60; Column 10, Lines 12-30).

Regarding Claim 15 Bush teaches a delivery system and method wherein the system records a plurality of delivery information as discussed above. Bush further teaches that the system utilizes a plurality of transportation modes/providers (carriers, shippers, shipping and handling entities, logistics providers, etc.) in order to delivery the product delivery order (shipment) just in time to the destination location (Column 3, Lines 45-57; Column 6, Lines 5-15).

Bush does not expressly teach recording the time of exchange/transfer and the names of the entities involved in the exchanged/transfer each time the product (shipment) is exchanged (transferred) between/amongst shipping and handling entities as claimed.

Aklepi et al. teach capturing a plurality of information related to the exchange/transfer of the product delivery order (shipment) between the plurality of transportation entities (Column 5, Lines 15-25 and 33-65; Column 7, Lines 50-68; Figure 2), including the time of the transfer and the names (processing station, handheld scanner, gate, etc. identifiers) of the entities involved in the transfer, in an analogous art of delivery management, for the purposes of recording and providing the most accurate tracking/shipment information possible (Column 1, 63-68).

It would have been obvious to one skilled in the art at the time of the invention that the delivery system and method, with its utilization of a shipment itinerary (delivery route) comprising a plurality of shipping and handling entities, as taught by Bush would have benefited from recording (capturing, storing, etc.) a plurality of information, including but not limited to the time and entity names, related to the exchange of the delivery order amongst the plurality of shipping and handling entities utilized is executing the shipment's itinerary in view of the teachings of Aklepi et al.; the resultant system enabling users/customers to access in real-time or near real-time accurate and

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detailed tracking/shipment information (Aklepi et al.: Column 1, 63-68, Column 10, Lines 13-25).

Regarding Claims 16-17 Bush teaches a delivery system and method wherein tracking the shipment further comprises establishing (determining, calculating, estimating, entering, etc.) a critical time during the delivery process (e.g. shipment on schedule, predetermined delivery time period) and periodically determining whether the delivery process has passed the critical period of time (e.g. determine at a checkpoint, periodic time interval, if the product is going to be late based on the time and location of the shipment; Column 3, Lines 4-15; Column 5, Lines 23-60; Column 6, Lines 1-34; Figure 4).

Bush further teaches that the delivery system and method utilizes a plurality of shipping and handling entities (transportation modes, carriers, shippers, etc.) as part of the product delivery order's (shipment's) itinerary (schedule, route, etc.) as discussed above.

Bush does not teach that the shipment's status (whether or not it has passed the critical delivery time) is determined at each shipping and handling exchanges/transfers as claimed.

Aklepi et al. teach determining (evaluating, estimating, etc.) the status/progress of the shipment (product order delivery) at each of the shipping and handling exchanges

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(processing stations, transfer points, etc.), in an analogous art of delivery management, for the purposes of optimizing the delivery (route, schedule, etc.) to ensure the delivery of the shipment/product at a predetermined time and location (Column 4, Lines 51-60; Column 9, Lines 1-23).

It would have been obvious to one skilled in the art at the time of the invention that the delivery system and method, with its ability to periodically determine the status of the product order delivery (shipment), as taught by Bush would have benefited from determining the shipment's status (on-time, late, etc.) at each of the shipping and handling exchanges in view of the teachings of Aklepi et al.; the resultant system enabling users to take corrective action, i.e. select another carrier/supplier/source, in order to ensure an on time delivery (Bush: Column 6, Lines 5-15; Aklepi et al.: Column 9, Lines 19-22).

Regarding Claim 18 Bush teaches a delivery system and method wherein if it is determined that the product (delivery, order, shipment, etc.) will reach the destination in the predetermined time further comprises delivering the product when it has reached the predetermined delivery destination (Abstract; Column 3, Lines 4-15; Column 6, Lines 1-34).

Bush does not expressly teach determining if the product has reached the delivery destination as claimed.

Official notice is taken that determining (confirming, establishing) that a shipment (product order, delivery, etc.) has reached its delivery destination (receipt/delivery confirmation) is old and very well known as a mechanism enabling users (customer, clients, etc.) to obtain proof of delivery as part of their tracking/monitoring of the progress of their shipments is old and well known, as evidenced at least by the applicant's own admission (Specification: Page 1, Lines 22-32; "...to the customer whose signature must be obtained, returned and stored for proof of delivery.", Page 2, Lines 1-3).

It would have been obvious to one skilled in the art at the time of the invention that the delivery system and method as taught by Bush would have benefited from determining (recording) that the product order delivery (shipment) reached its intended destination (manufacturing facility) in view of the teachings of official notice; the resultant system enabling users to show proof of delivery.

Regarding Claim 19 Bush teaches a delivery system and method wherein if it is determined that the product (delivery, order, shipment, etc.) will *not* reach the destination in the predetermined time further comprises:

- contacting (communication, calling, etc.) an alternative supplier (product supplier, shipping order, purchase order, etc.; Column 6, Lines 5-27; Figure 4);

- providing the alternative supplier with the delivery order information (product, location, shipping order, purchase order, etc.; Column 6, Lines 5-27; Figure 4); and
- shipping the product from the alternative supplier to the delivery destination (Column 3, Lines 4-15; Column 6, Lines 5-27; Figure 4).

Regarding Claim 20 Bush teaches a delivery system and method wherein the delivery order is delivered to the initial delivery destination (Abstract; Column 3, Lines 4-15; Column 6, Lines 60-68; Column 7, Lines 1-3).

Regarding Claims 21-22 Bush teaches a delivery system and method wherein alternative suppliers/sources, located in close proximity to the delivery location (Column 5, Lines 23-26), and/or shipping and handling entities (shippers, carriers, transportation modes, etc.) are utilized to ensure the delivery of a product (parts, materials, etc.) during a predetermined period of time (i.e. just-in-time manufacturing) as discussed above.

Bush does not teach exchanging the product of an alternate supplier/source with the shipped product as claimed.

Official notice is taken that inventory swapping (i.e. when an originally ordered shipped product is delivered to the alternative supplier and becomes part of the alternate supplier's inventory) is old and well as evidenced at least in part by the

applicant's own admission (Specification: "Inventory swapping between suppliers of the same product are not unusual in many industries.", Page 10, Lines 16-18).

An example of inventory swapping can be found in the airline industry wherein airlines share "local" parts inventories when a part necessary for an aircraft repair is ordered but will not arrive in the required time period. In essence airlines become alternative suppliers for one another by providing/sourcing the necessary part and once the originally ordered part arrives it is sent/forwarded to the alternative supplier (airline) to replace/replenish their parts inventory.

It would have been obvious to one skilled in the art at the time of the invention that the delivery system and method, with its ability to identify, select and ship alternative products from an alternative source/supplier in order to ensure an on time product delivery, as taught by Bush would have benefited from replenishing the inventory of the alternative supplier with the originally scheduled product/delivery order in view of the teachings of official notice; the resultant system enabling the alternate supplier/source to replenish his/her inventory.

Regarding Claim 33, the system as claimed is merely "capable" of implementing an alternative delivery program, however the system does not actually implement an alternative delivery program. For the purposes of examination examiner assumes the applicant will amend the claim to recite that delivery system actually implements an alternative delivery program.

Further regarding Claim 33 Bush teaches a method and system for ensuring the delivery of a product (materials, parts, goods, etc.) to a delivery destination (manufacturing facility) within a predetermined time period ("just in time") comprising (Column 1, Lines 58-68; Column 2, Lines 45-61; Column 3, Lines 4-15):

- receiving (collecting, providing, etc.) a delivery order (request, purchase order, shipping order, etc.) from a customer (user, client, manufacturing facility, etc.) containing product (parts, materials, etc.) and delivery (time and location) information (Column 5, Lines 49-47; Figure 4);

- processing (reviewing, acting upon, implementing a series of steps, etc.) the delivery order (Column 3, Lines 4-15 and 40-47; Figure 4);

- shipping the order to the delivery location (Column 3, Lines 50-57; Figure 4);

- tracking the shipped order along a delivery route (itinerary, schedule, etc.) to assess the progress (status) of the shipment/delivery (Column 5, Lines 51-68; Column 6, Lines 1-34; Column 7, Lines 1-3; Figure 2, Element 20; Figure 4); and

- implementing an alternative delivery program (switchover entity, method, step, process, policy, rule, etc.), if the order tracking indicates the shipment will not reach the delivery destination within the predetermined time (early, late, delayed, etc.; Column 3, Lines 4-15; Column 5, Lines 51-68; Column 6, Lines 1-34; Figure 4, Elements 48, 50, 52 and 54).

Bush does not expressly teach storing product/delivery information in a database as claimed.

Aklepi et al. teach storing/recording information a plurality of delivery information a database (including delivery order information), in an analogous art of product/materials delivery management, for the purposes of providing a convenient and/or efficient mechanism for storing and accessing a plurality of data via the Internet (Column 4, Lines 50-68; Column 6, Lines 17-24; Column 7, Lines 10-35; Figure 1, Element 102).

It would have been obvious to one skilled in the art at the time of the invention that the delivery system and method, with its ability to store/record a plurality of delivery information, as taught by Bush would have benefited from recording/storing that information in a database in view of the teachings of Aklepi et al.; the resultant system enabling users to efficiently and/or conveniently store and/or access the plurality of delivery information stored by the system via the Internet (Aklepi et al.: Column 10, Lines 13-43).

Regarding Claim 34 Bush teaches a delivery system and method wherein the order processing, switchover and storage components (modules, subsystems, software, devices, etc.) are contained in a server (computer, device, system) at one location (Column 5, Lines 5-22; Figure 3, Element 30).

Regarding Claim 35 Bush teaches a delivery system and method wherein the system communicates over a communication network (e.g. telephone network; Column 5, Lines 5-22; Figure 3, Element 34).

Regarding Claim 36 Bush teaches a delivery system and method further comprising a decision-making component (subsystem, code, routine, module, etc.) that determined whether to implement the alternative delivery program (process, method, series of steps, etc.) based on shipment tracking information (Column 5, Lines 38-68; Column 6, Lines 1-34; Figure 4).

Regarding Claim 37 Bush teaches a delivery system and method wherein the decision-making component further comprises switchover rules (policies, business logic, etc.) with to perform the implementation of alternative delivery programs (Column 5, Lines 38-68; Column 1-34).

Regarding Claim 38 Bush does not expressly teach that the delivery system utilizes a database as claimed.

Aklepi et al. teach storing/recording information a plurality of delivery information a database (including delivery order information) including but not limited to supplier and shipping and handling entity data (processing stations), in an analogous art of product/materials delivery management, for the purposes of providing a convenient

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and/or efficient mechanism for storing and accessing a plurality of data via the Internet (Column 4, Lines 50-68; Column 6, Lines 17-24; Column 7, Lines 10-35; Figure 1, Element 102).

It would have been obvious to one skilled in the art at the time of the invention that the delivery system and method, with its ability to store/record a plurality of delivery information, as taught by Bush would have benefited from recording/storing supplier and shipping and handling entity data information in a database in view of the teachings of Aklepi et al.; the resultant system enabling users to efficiently and/or conveniently store and/or access the plurality of delivery information stored by the system via the Internet (Aklepi et al.: Column 10, Lines 13-43).

Regarding Claims 39-40 Bush does not teach the utilization of databases or the subsequent location of databases as claimed.

Aklepi et al. teach a delivery system and method wherein the system utilizes a distributed architecture (e.g. Internet) and further wherein the supplier and shipping handling databases are in different physical locations (i.e. distributed system/environment; Column 11, Lines 1-9).

It would have been obvious to one skilled in the art at the time of the invention that the delivery system and method as taught by Bush would have benefited from

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storing a plurality of information, including but not limited to supplier/source and/or shipping and handling (carrier, shipper, logistics provider, etc.) information in one or more databases and in one or more distributed systems/locations in view of the teachings of Aklepi et al.; the resultant system providing the well known benefits of distributed computing such as connecting users and resources in a transparent, open, and scalable way.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Manduley et al., U.S. Patent No. 5,043,908, teach a delivery system and method wherein the system enables users to track/monitor shipments in near real-time as well as take corrective actions (e.g. alternative shipping option) for shipping delays. Manduley et al. teach that the system utilizes a data center comprising of a plurality of databases for storing/recording shipment details including but not limited to the time and name of each checkpoint (processing station) that process the shipment along its delivery route. Manduley et al. further teach that the system provides status/progress information as well as an estimated time of arrival (delivery).

- Martin et al., U.S. Patent No. 5,809,473, teach a delivery system and method for ensuring the on-time delivery of products (product delivery) within a predetermined time period, wherein products are shipped based on customer order and preferences information stored in a plurality of databases.

- Tskuda, Gunji, U.S. Patent No. 6,085,170, teaches a delivery system and method wherein the system delivers products during a predetermined time period based on product, distributor and customer information.

- Kraisser et al., U.S. Patent No. 6,701,299, teaches a product delivery system and method for ensuring the delivery of a product to a delivery destination within a predetermined time window/period.

- McGibney, James, U.S. Patent No. 6,850,830, teaches a delivery system and method for tracking the time-based location of time-sensitive shipments utilizing time-based checkpoints (periods, intervals).

- Smith et al., U.S. Patent No. 6,879,962, teach a product/material delivery system and method (logistics) wherein the system monitors and reports on a plurality of information related to the progress (status) of the shipment (delivery) including but not limited to providing periodically updated estimated time of arrival data based on the shipments current location and delivery destination.

- Oswalt, Richard, U.S. Patent No. 6,929,181, teaches a method and system for ensuring and tracking a delivery of a product to a delivery destination within a predetermined time period (date specific delivery).

- Borders et al., U.S. Patent Publication No. 2001/0047285, teach an online method and system for ensuring a delivery of a product to a delivery destination within a predetermined time period/window wherein the system comprises a plurality of subsystems and databases to receive, process, ship, route, and track customer orders.

- Powell et al., U.S. Patent Publication No. 2001/0049619, teach a method and system for ensuring the delivery of a service to a delivery destination during a predetermined time period/window.

- Florence, U.S. Patent Publication No. 2002/0007299, teaches a method and system for delivery of a product within a predetermined time period/window.

- Terada et al., U.S. Patent Publication No. 2002/0111914, teach a product delivery system and method wherein the system provides the location of the product delivery (shipment) at any time as well as receipt confirmation over a network.

- Young, Jeffrey, U.S. Patent Publication No. 2004/0030604, teaches an online method and system for ensuring a product delivery within a predetermined time period (deadline).

- Cooke, James Aaron, Red flags (2000), teaches the well-known utilization supply chain management systems wherein the systems provide a plurality of information regarding the delivery of products (parts, materials, etc.) necessary for ensuring the delivery of a product to a delivery destination within a predetermined delivery time period. Cooke further teaches that shippers (carriers, shipping and handling entities, etc.) provide product delivery "alerts" (triggers, messages, flags, etc.) to other entities in the supply chain and that these alerts go beyond simple event notification by enabling entities to implement contingency shipping/delivery plans when it is determined that a product delivery/shipment will not meet its predetermined delivery time period. Cooke further teaches that the contingency plans (guidelines, logic, rules, etc.) include the identification of alternative shipping methods and/or suppliers.

- Boggs et al., JIT drives partners to profit (1989), teach a plurality of well known Just-In-Time systems (JIT) wherein the systems enable businesses to determine when a product delivery is not able to be delivered during the predetermined time period and consequently identify/select alternative (backup) shipping and handling entities (carriers) to delivery the product (shipment).

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- When you have a need for speed (1998), teaches the old and well-known business of expedited shipping and handling (shippers, carriers, critical-shipment services, etc.). The article further teaches that several carriers closely monitor the on-time performance of shipments (i.e. their ability to delivery the product during a predetermined time period).

- Supply chain fundamentals working the box (2001), teaches the importance of exceptions management in supply chain management systems particularly pointing out the importance of inventory, order and status information. The article further teaches the commercial availability of a plurality of transportation and warehouse management systems including but not limited to Clicklogistics online wherein the client/server system enables businesses to “automatically re-tender freight to back-up carriers when the primary carrier is out of trucks” (i.e. alternative delivery program/process).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott L. Jarrett whose telephone number is (571) 272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


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